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Collana	Programming and Software Engineering ; ; 8164
Disciplina	005.1
Soggetti	Software engineering Computer logic Programming languages (Electronic computers) Computer programming Mathematical logic Artificial intelligence Software Engineering Logics and Meanings of Programs Programming Languages, Compilers, Interpreters Programming Techniques Mathematical Logic and Formal Languages Artificial Intelligence
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Nota di contenuto	Classifying and Solving Horn Clauses for Verification -- Static Analysis of Programs with Imprecise Probabilistic Inputs -- Effect Analysis for Programs with Callbacks -- Compositional Network Mobility -- Parallel Bounded Verification of Alloy Models by TranScoping -- Extending the Theory of Arrays: memset, memcpy, and Beyond -- An Improved Unrolling-Based Decision Procedure for Algebraic Data Types -- Program Checking with Less Hassle -- Verified Calculations. -- Preserving User Proofs across Specification Changes -- An Automatic Encoding from VeriFast Predicates into Implicit Dynamic Frames --

Automated Code Proofs on a Formal Model of the X86 -- Verification of a Virtual Filesystem Switch -- Verifying Chinese Train Control System under a Combined Scenario by Theorem Proving -- Formal Verification of Loop Bound Estimation for WCET Analysis -- Result Certification of Static Program Analysers with Automated Theorem Provers -- A Formally Verified Generic Branching Algorithm for Global Optimization.

Sommario/riassunto

This volume constitutes the thoroughly refereed post-conference proceedings of the 5th International Conference on Verified Software: Theories, Tools, and Experiments, VSTTE 2013, held in Menlo Park, CA, USA, in May 2013. The 17 revised full papers presented were carefully revised and selected from 35 submissions. The papers address a wide range of topics including education, requirements modeling, specification languages, specification/verification case-studies, formal calculi, software design methods, automatic code generation, refinement methodologies, compositional analysis, verification tools, tool integration, benchmarks, challenge problems, and integrated verification environments.
